

What is claimed is:

1. A trap vector containing a *loxP* sequence composed of inverted repeat sequence 1, a spacer sequence and inverted repeat sequence 2 in this order, said *loxP* sequence being a mutant *loxP* wherein a part of said inverted repeat sequence 1 is mutated.
2. The trap vector of claim 1, wherein the mutant *loxP* is *lox71*.
3. The trap vector of claim 2, wherein *lox71* is as shown in SEQ ID NO: 1.
4. A trap vector containing a *loxP* sequence composed of inverted repeat sequence 1, a spacer sequence and inverted repeat sequence 2 in this order, said *loxP* sequence being a mutant *loxP* wherein a part of said inverted repeat sequence 2 is mutated.
5. The trap vector of claim 4, wherein the mutant *loxP* is *lox66*.
6. The trap vector of claim 5, wherein *lox66* is as shown in SEQ ID NO: 2.
7. A trap vector selected from the group consisting of the following (a) to (h):
 - (a) SP-SA-*lox71*-IRES-M-*loxP*-PV-SP
 - (b) SP-*lox71*-IRES-M-*loxP*-PV-SP
 - (c) SA-*lox71*-IRES-M-*loxP*-pA-PV-SP
 - (d) SA-*lox71*-IRES-M-*loxP*-*puro*-pA-PV-SP
 - (e) *lox71*-M-*loxP*-pA-*lox2272*-PV-*lox511*
 - (f) *lox71*-IRES-M-*loxP*-pA-*lox2272*-PV-*lox511*
 - (g) (*lox71*-integrated SA)-M-*loxP*-pA-*lox2272*-PV-*lox511*
 - (h) (*lox71*-integrated SA)-IRES-M-*loxP*-pA-*lox2272*-PV-*lox511*
 - (i) (*lox71*-integrated SA)-M-*loxP*-pA-*lox2272*-promoter-M-*lox511*-SD,

wherein SP represents any sequence; SA represents a splice acceptor; SD represents a splice

donor; IRES represents an internal ribosomal entry site; M represents a marker gene; *puro* represents ; pA represents a poly(A) sequence; and PV represents a plasmid vector.

8. The trap vector of claim 7, wherein the plasmid vector is any one selected from the group consisting of pBR, pUC, pSP and pGEM.

9. A vector generated from recombination between the trap vector of claim 1 and the trap vector of claim 4.

10. The vector of claim 9, wherein said vector does not undergo recombination with other *loxP*.

11. A method of gene trapping, comprising introducing the trap vector of any one of claims 1 to 8 into embryonic stem cells.

12. Embryonic stem cells into which the trap vector of any one of claims 1 to 8 is introduced.

13. A transgenic animal into which the trap vector of any one of claims 1 to 8 is introduced.

14. The transgenic animal of claim 13, wherein said animal is selected from the group consisting of mouse, rat, rabbit, guinea pig, pig, sheep and goat.

15. A method for producing a transgenic animal, comprising introducing the embryonic stem cells of claim 12 into an animal.

16. A knockout animal into which the trap vector of any one of claims 1 to 8 is introduced.

17. The knockout animal of claim 16, wherein said animal is selected from the group consisting of mouse, rat, rabbit, guinea pig, pig, sheep and goat.

18. A method for producing a knockout animal, comprising introducing the embryonic stem cells of claim 12 into an animal.